

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

COTE et al.

Serial No. 09/916,247

Filed: July 30, 2001

For: **CHEMICAL CLEANING
BACKWASH FOR NORMALLY
IMMERSED MEMBRANES**

Art Unit: 1723

Examiner: MENON, Krishnan, S.

The Commissioner of Patents
& Trademarks
Washington, D.C. 20231
U.S.A.

Dear Sir:

DECLARATION UNDER 37 CFR §1.132

I, Ake A. Deutschmann, residing at 1324 Silvan Forest Drive, Burlington, Ontario, L7M 4L2, citizen of Germany, do hereby solemnly declare:

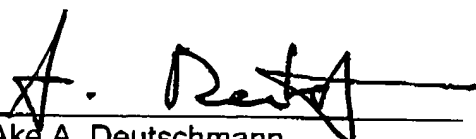
1. I am the Director Information Technology at Zenon Environmental Inc. I am also a co-inventor of U.S. Patent No. 5,403,479. My co-inventors Bradley M. Smith and Kenneth P. Goodboy are no longer employed with Zenon Environmental Inc.
2. I was involved in the pilot plant testing referred to at column 20, line 35 to column 21, line 15 and Figure 6 of U.S. Patent No. 5,403,479. That pilot plant testing involved cleaning membranes with a citric acid solution having a pH of 2.5. This cleaning solution was made by filling a cleaning solution tank with permeate from the pilot plant and adding citric acid while vigorously mixing until the pH of the solution dropped below 2.5. The pH was measured with a pH probe positioned in the cleaning solution tank. I do not have any record or memory of exactly how much citric acid was required to produce the solution referred to in the pilot plant testing described in U.S. Patent No. 5,403,479. The amount of citric acid would have depended on the buffering capacity of the permeate. I do not have any record or memory of the concentrations of chemicals in the permeate

sufficient to estimate the buffering capacity of the permeate with precision. However, since the pilot plant was filtering groundwater, the permeate would have had some buffering capacity.

3. Some time after the testing referred to in U.S. Patent No. 5,403,479, myself or others at Zenon Environmental Inc. specified a citric acid concentration to be used to make a cleaning solution having a pH of 2.5. The specified concentration was intended to attain a pH of 2.5 when added to various sources of water likely to be used as the basis for a cleaning solution. The specified concentration was 5 g/L of citric acid.
4. I am informed by one of my co-workers, Henry Behmann, that he very recently performed an experiment to determine what concentration of citric acid was required to produce a pH of 2.5 when mixed with deionized reverse osmosis permeate. Deionized reverse osmosis permeate has minimal buffering capacity. I am informed by Mr. Behmann and believe that his experiment showed that 2 g/L of citric acid were required to produce a pH of slightly less than 2.5 in deionized reverse osmosis permeate.

I declare that all statements made in this declaration of my own knowledge are true, and that all statements made on information and belief are believed to be true. I make these statements with the knowledge that willful false statements are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code, and that any such any willful false statements may jeopardize the validity of the present application or the patent issuing from it.

6/10/03
Date


Ake A. Deutschmann
Director Information Technology
Zenon Environmental Inc.